Upstrea	Su	mma	Upstream Summary Table	-											
Table: I	Soc	J.	DocsIFUpstreamChannelTable	annelT	able										
		\vdash													
WMTS ID IfIndex	Slot	Card Port	RF Frequency Sector		Channel Bandwidth	Modulation Type	Upstream Downconverter LO	Transverter Offset	FEC Factor	Symbol Rate	Data Rate	WMU Output Frequency	WMTS Input Frequency	RF Band Bottom	RF Band Top
		H	MHZ	2	KH2		MHZ	MHz		KHz	BpS	MHz	MHZ	MHz	MHz
1	-	A	2	00	3200 QPSK	SPSK	2100	2135.625	q	2560	5120	17.375	53.00	2151.40	2154.60
A C	2	\vdash	╁	120	500	200 16QAM	2100	2135.625	0	160	640	14.575	50.20	2150.10	2150.30
		\vdash	╁	20	400	QPSK	2100	2135.625	ပ	320	1280	14.875	50.50	2150.30	2150.70
1 1		CB	\vdash	9	008	16QAM	2100	2135.625	ಶ	640	2560	15.475	51.10	2150.70	2151.50
1 -		0 8	┢	30	1600 QPSK	QPSK	2100	2135.625	а	1280	2560	16.675	52.30	2151.50	2153.10
1	2	ш	╁	3.90	1600	16QAM	2100	2135.625	q	1280	5120	18.275	53.90	2153.10	2154.70
4	2	ш	B 2155.10	10	008	QPSK	2100	2135.625	q	640	1280	19.475	55.10	2154.70	2155.50
< α	c	A	┝	.70	400	400 QPSK	2100	2135.625	а	320	640	20.075	55.70	2155.50	2155.90
	4	\vdash	╁╌	00.	800	QPSK	2100	2135.625	ပ	640	1280	21.375	57.00	2156.60	2157.40
	2	A	-	09.	400	QPSK	2100	2135.625	q	320	640	21.975	27.60	2157.40	2157.80
Bold a	9	erato	Bold are operators inputs		select	select				= bandwidth/1.25		= RF Freq - transverter offs	= RF Freq - Upstream LO	= RF Freq - (Bandwidth/2)	= RF Freq + (Bandwidth/2)
			-	-						-	if QPSK=2*symbol	2*symbol			
A mode	J S,W	orofile	is made	up of its	s Downs	stream and	d Upstrea	A modem's profile is made up of its Downstream and Upstream IfIndexes			f 16QAM	if 16QAM=4*symbol			
FEC far	Stor is	the	FEC factor is the type of FEC used for that profile	Sc used	d for tha	t profile									

FIG. 1

Bandwidth/Mo	odulation tradeoffs												
downstream	assume 64 QAM and 6 MHz as reference												
	required S/N for 10^-6		27	21.5	13.5								
	Modulation		64 QAM	16 QAM	QPSK								
		Bandwidth											
		6000	0.0	5.5	13.5								
Downstream		2000	4.8	10.3	18.3								
		1000	7.8	13.3	21.3								
Up Stream	assume 16 QAM and 2 MHz as required S/N for 10^6 Modulation	reference		21.5 16 QAM	13.5 QPSK								
	modulation.	Bandwidth		10 QAIN	QI OIL								
		3200		0.0	8.0								
		1600		3.0	11.0								
		800		6.0	14.0								
		400		9.0	17.0								
		200		12.0	20.0								

FIG. 2

							_	_	_	_		_			- т		\neg
RF Band Top	MHz	2512.00	2514.00	2512.00	2519.00	2520.00	2521.00	2522.00	2523.00	2524.00	2524.00	:	= RF Freq + (Bandwidth/2)				
RF Band Bottom	MHZ	2506.00	2512.00	2506.00	2518.00	2519.00	2520.00	2521.00	2522.00	2523.00	2518.00		= RF Freq - (Bandwidth/2)				
WMTS Output Frequency	MHZ	44.00	42.00	44.00		42.50	43.50	44.50	45.50	46.50	L	1	= RF Freq - WMTS LO		lo	loc	loqu
WMU Input Frequency	MHz	231.00	235.00	231.00	240.50	241.50	242.50	243.50	244.50	_	243 00	240.00	= RF Freq - WMU LO	if QPSK=2*symbol	if 16QAM=4*symbol	if 64QAM=6*symbol	256QAM=8*symbol
Data Rate	BpS	30000	2999	30000	1667	1667	1667	1667	1667	1667	1000	00001		if QPSK	lf 16QAN	if 64QAN	if 256QA
Symbol Rate	KHZ	2000	1667	2000	833	833	833	833	833	833	000	nnnc	= bandwidth/1.25				
FEC Factor		G	ـــ	O	_	-	q	q	1-	-	-	٥			v.		
Transverter LO	MH2	2278	2278	2278	2278	2278	2278	2278	9778	9700	2700	8/77			m IfIndexe		
Transmitter LC	¥¥	2465	2471	2465	2477	2477	2477	2477	2477	7777	1147	7/47			od I lostrea	200	
Modulation Type		SOOD BACAM	2000 160AM	GOOD GACAM	N S S S	CPSK	1000 OPSK	OPSK	OPCK		לה לה	QPSK	selec	t	retream ar	2000	
Channe Bandwidth		6000	2000	9009	1000	000	1000	1000	100	000		0009	selec	t	of ite Down	ON IS DOWN	
RF Frequency	/ 1	2500 00	2513.00	050000	2519.00	2510.30	2520.50	252150	05.130	02.222	7523.50	2521.00			Indexes	Illane up	
Secto	r	-	< <	(0	ماد) c	C			اد	ပ					2	
Card Por	t	-	< 0	> د	< <	< 0	3 C	0	2 1		ш	4				2	
Slo	t	Ŧ	- 0		V C				7 0	·D	4	rc.		L	_ 1	SE	
WMTS II	5	-	∢ <	<	< <	<	<			_	4	4	_		1	90	
IfInde	х	1	- 0	40	ກ ເ	4 1	0 4	1 C	- (∞	റ	ç	2			₹	

FIG. 3

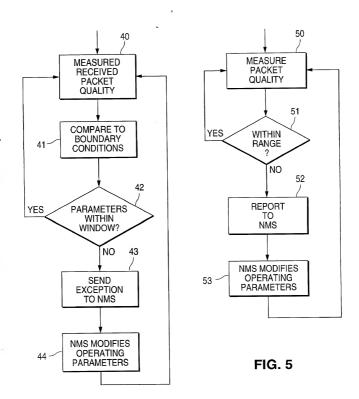


FIG. 4